BOROUGH OF CHATHAM

Area in Acres 4443. 298

Population census 1891 31657

Males 17076 females 14581

To the Mayor & Corporation,

Gentlemen,

In the following report I have endeavoured to place before you as briefly as possible, an account of the Sanitary Condition of your District during the year ending December 31st 1893, and to summarize the proceedings taken during that period for preventing the spread of disease.

In endeavouring to form a correct estimate of the mortality of a district during any given period it is essential to have a fairly accurate idea of the population, and I have therefore assumed that the ratio of increase during the decenium 1881, 1891 is maintained during the present inter-censal period, and in that case the population of the District estimated to the middle of 1893 would be 32964. I have therefore calculated all statistics in the present report on that estimate.

The total number of Births registered during the year was 941, Males 485, females 456. Birth rate 28, 5 per 1000.

During the year 1892 the Births numbered

973, and the Birth rate was 30, 1 per 1000, and it will be seen from a table embodied in this report that the Birth rate during 1893 is the lowest recorded for many years.

The total number of Deaths registered during the past year was 620, out of this number 178 occurred in the public Institutions of the District viz:- 148 in the Medway Union Workhouse, and 30 in Melville Hospital. Before calculating the rate of mortality certain additions and deductions must be made. The additions are of persons dying out side of the District but belonging to it, and the deductions are of persons dying in the District, but who belong to other places. On inquiry I find that there are 9 deaths in St. Williams Hospital for Infectious Diseases and 17 deaths in St Bartholemews Hospital of persons who resided in Chatham. Both these Institutions are in the Rochester Sanitary District and therefore these deaths must be added to the above total, out of the 148 deaths occurring in the Medway Union Workhouse 37 were of persons belonging either to Rochester or Gillingham so that the corrected return would be as follows:-

Total deaths registered	620
additions as above described	26
	646
Deductions	37
Total	609

Rate of mortality 18. 4 per 1000

The deaths registered during each month of the year were in January 43, February 45, March 48, April 46, May 46, June 35, July 70, August 67, September 46, October 48, November 56, December 69.

The above figures show the rate of mortality to have been fairly constant during the first six months of the year, descending slightly in June, to be followed by a sudden rise in July, maintained through August, descending again in September, and again rising gradually from October to December when the number ofrdeaths was practically the same as in July and August. The early months of the year were remarkable for the equable and genial character of the weather and the mortality amongst the aged and infirm, and also from Diseases of the Respiratory argans was below the average.

The sudden rise in the mortality during July was due to the presence of epidemic Diarrhoea, while the increased number of deaths at the end of the year was due to the prevalence of Influenza, and its Complications, the mortality having fallen especially heavily on the aged.

The following table shows the estimated population, Birth and Death rates for the past seven years.

Year	Population	Births	Deaths	Birth Rate	Death Rate
1887	29562	1034	563	35.	19. 04
1888	30086	1009	552	33. 5	18. 3
1889	30609	956	531	31. 2	17. 3
1890	31132	972	615	31. 1	19. 7

Year	Population	Births	Deaths	Birth Rate	Death Rate
1891	31657	932	600	29. 4	18. 9
1892	32310	973	576	30. 1	17. 8
1893	32964	941	620	28. 5	18. 9

The above rates are calculated on the total number of deaths registered in each year, and show but slight variation in the mortality of the District during the period quoted.

The ages at which deaths occurred were as follows:-

Under 1 year	154
1 and under 5 years	44
5 " 15 "	23
15 " 25 "	41
25 " 65 "	196
65 and upwards	102

The grouping into ages is an accordance with the Local Government Table A, which I have filled in and appended to this report.

The number of deaths occurring in separate localities was in St Marys Ward 166, Luton Ward 154, St Johns Ward 122, Medway Union Workhouse 148, Melville Hospital 30,

I have estimated the population in each Ward according to the number of houses on the rate books, and according to this estimate, which is the only one available for the purpose, the death rate in each ward is as follows:-

St Mary's 15. 7 per 1000

Luton 12. 5 per 1000

St Johns 12. 1 per 1000

The above bears out the theory that the mortality is always highest where there is the greatest density of population and compared with the other wards, these conditions are certainly more prevalent in St Mary's.

The Infant mortality-that is- the proportion of deaths under 1 year of age to every 1000 births is 163 per 1000, as compared with 150 during 1892.

The number of deaths from Diseases of the Respiratory organs, excluding Phthisis was 73, whilst Phthisis or Tuberculosis caused 94 deaths equal to a rate of 2. 8 per 1000.

The excessive prevalence of Phthisis is always a blot upon the Sanitary conditions of a District and may be held to denote either overcrowding insufficient ventilation, unhealthy occupations, a damp and foul subsoil, or a combination of these circumstances, in other words Phthisis mortality can always be diminished by improved sanitation. With respect to the infective nature of the disease, about which there is now but little doubt, when it is communicated it is usually by inhalation, or by the swallowing of the dried expectoration which in the form of dust is largely present in rooms occupied by consumptive patients, therefore such patients should always expectorate into a proper vessel containing some

liquid disinfectant, which should be frequently emptied, or if away from home, should always receive the expectoration into a rag or handkerchief kept for the purpose, which should be either burned, or disinfected by boiling for a few minutes. The rooms inhabited by such patients should be kept well aired and free from dust.

Diseases of the heart caused 57 deaths and 11 deaths were due to Injuries.

From Diseases of the so called Zymotic class, including those occurring in St Williams Hospital there were 69 deaths, equal to a rate of 2. per 1000.

Many people are apt to look upon the Zymotic death rate as the one important factor in determing the health of a locality and whilst admitting that a high death rate from Diphtheria, Enteric Fever, or Infantile Diarrhoea, any be held as indicating defective sanitary conditions still the occurrence of Zymotic diseases may at times be due to temporary, or accidental causes, so that the amount of general sickness prevailing in a district is a safer criterion of its salubriety.

These deaths were due to the following diseases. Scarlatina 4, Diphtheria and Membranous Croup 5, Typhus Fever 2, Typhoid or Enteric Fever 3, Measles 1, Whooping Cough 4, Dairrhoea 45.

Scarlatina, although not causing many deaths has been present in your District, throughout the year, but the

bulk of the cases have been notified during the past three months. Altogether 72 cases were notified, and out of this number 44 were sent into the Infectious Diseases Hospital. In several cases where the patients were kept at home, it was only with the result of causing other members of the family to contract the disease. Experience shows that in small houses with large families, it is practically impossible to properly isolate Scarlet Fever patients, owing to the long duration of the infection and to the facility with which it can be carried from the sick to the healthy.

For the first time for many years there have been outbreaks of Small Pox in the Borough but thanks to the measures taken, both outbreaks were limited in their effects. In all 13 cases occurred during the year. The first case was notified on the 13th March the patient being a vagrant who had tramped from London to Chatham, and who for two nights slept at a registered lodging house on the Brook. Feeling ill he obtained admission to the Workhouse Infirmary, but as soon as the nature of his illness became manifest he was removed to the Fever hospital. The room in which he has slept at the lodging house was temporarily closed, disinfected, and cleansed, and the bedding destroyed. During the next 14 days three cases occurred in the Medway Workhouse, owing to infection from the first case, but they were promptly removed and no further cases occurred. On the 3rd May two other cases came into the town, both being children of a vagrant who had left one son in Hospital at Dartford. They were at once sent to the Fever Hospital and

fortunately no further cases resulted, until the 18th August when another case occurred at the Workhouse, bit it was not possible to trace its origin, nor did any others occur. On November 13th a case of Smallpox occurred on the Beacon Road which was followed by one case on the Upper Luton Road, and three others on the Beacon Road. With respect to the origin of the first case it was found that another member of the family had been treated for what was considered to be Chicken Pox. This patient was a carter who went about all over the District and it is interesting to note that at the same time he developed Smallpox it was also found in the case of a hawker on the Brook. It may be merely coincidence, but it is a suspicious fact that at the time a permanent resident in the Borough contracts Small Pox, it is found to have been introduced into the town by a vagrant. Whatever may have been the origin of the first case, there was not the slightest doubt about the four subsequent ones, as direct communication was proved. Besides prompt removal and disinfection of the infected houses, I successfully urged the desirability of re-vaccination on the remaining members of the households, and these measures were rewarded by a stoppage of the outbreak, no case having occurred since November 29th.

The total number of notified cases of Diphtheria and Membranous Croup was 36, of which only 6 were removed to St Williams Hospital. The same remarks apply to this Disease as to Scarlatina, and the fact that in several houses the primary case was followed by others emphasises the

necessary for proper isolation. All the houses where cases occurred were examined and whatever defects were found were as far as possible remedied.

Typhus Fever made its appearance in Chatham during the first quarter of the year, and its incidence was made the subject of a special report to your Sanitary Committee with respect to the overcrowding, and insanitary condition of the houses where the outbreak occurred. It is a fever that is seldom seen at the present day except in the densely populated quarters of large towns where overcrowding, poverty, and filth prevail, and these conditions were associated with the outbreak in this Borough. It will be noticed that in Table 3, only one case is entered under the heading of Typhus, but three others notified as Enteric Fever proved to be Typhus on arrival at the Fever Hospital.

Of Enteric or Typhoid Fever 32 cases were reported and in many instances important sanitary defects were found and remedied. The largest number of cases occurred during the month of October, but no month was free from the disease, nor was its incidence marked in any particular locality, showing that some cause operating throughout the District was mainly instrumental in producing the Fever. Probably the presence near most houses, of large stores of decomposing filth in privy vaults is an important factor in the causation of this disease. Two cases were men who had been employed on H.M.S.Howe, and it was alledged that the foul condition of this Ship after her long submersion had caused the illness, but the inquiries made by the Naval authorities negatived this view. It is recently reported

that in consequence of the unusual amount of illness on board the Howe, it has been decided to renew the interior woodwork, in consequence of its foul condition soit is not improbable that some cases were caused on board the vessel.

The epidemic disorder most fatal during the past year was Infantile Diarrhoea. No fewer than 45 deaths were registered from this cause, but as it is notin the list of notified diseases, I am unable to say what proportion these deaths bear to the actual number of cases attacked. The mortality commenced in June rose rapidly to a maximum in July declined slightly in August, considerably in September, and at the begining of October ceased to be included in the death returns. For some years the death rate in Chatham has been rather above the average for this Disease, of course varying from year to year according to the degree of temperature, being always greater in hot seasons. The summer of 1893 was notable for its high temperature, and given a porous soil, subject to pollution from cesspool leakage, such as obtains here, we have the necessary conditions for causing fatal Diarrhoea, especially in the more densely populated parts of the District, and in particular, in houses where the virtues of fresh air are unknown and cleanliness is not practised.

Influenza was present, but not prevalent during the early months of 1893, but during November and December it again became epidemic, and gave rise to a large amount of sickness throughout the District. Five deaths were directly ascribed to it but many others registered as Diseases of the

Lungs or Heart were due to its effects.

Under the Infectious Diseases notification Act of 1889, 247 cases of sickness were reported during the year, the numbers of each disease being shown in the Local Government Table B, which is appended also the numbers of each disease removed to the Isolation Hospital. Of these 247 cases,87 or 35 percent were due to Erysipelas. This disease was included by law in the schedule but with what benefit I fail to see. It is a disease which tends to spread where numbers of surgical cases are aggregated,as in Hospital Wards but under the ordinary conditions of home life I am unable to point to a solitary instance out of these 87 cases where the disease was transmitted to another person, norwithstanding the fact that no attempt is made to isolate such patients, as is done in the case of the other diseases coming under this act.

Disinfection by the Sanitary Inspectors has been carried out in every house where Infectious diseases has occurred, either at the termination of the illness, or on the removal of the patient, the disinfectant used being Sulphurous Acid has. In all cases Of Enteric Fever I have caused a supply of disinfecting solution to be given to those in charge of the patient, for mixing with the excreta. To make disinfection thoroughly complete,a steam disinfector is necessary, so that the clothes and bedding could be properly dealt with. The fumigation of a room is excellent as far as it goes, but in the case of bedding and other bulky articles the only satisfactory method is exposure to steam under high pressure by means of a

proper apparatus.

The water supplied by the local company has maintained its high character as a drinking water, and drawn as it is from deep wells in the chalk, there is little fear of its ever becoming polluted. This danger is ever present in the case of shallow wells of which a few still exist throughout the Borough. Several samples of water from these wells have been examined and in many cases were found to be polluted with organic matter, and were closed. Considering the porous nature of chalk, and the short distance intervening between these wells and cesspools it is not surprising to find that sooner or later they became contaminated with organic filth.

The common Lodging Houses, Slaughter houses, Bakehouses, Dairies, and Cowsheds have been visited at intervals during the year, and every endeavour is made to keep these places in as sanitary a condition, as local circumstances permit. In connection with this subject, I would at once more draw your attention to the desirability of supplying the owners of these places with copies of Bye Laws or other regulations made for their conduct. With respect to the Lodging Houses and Slaughter houses, the bye laws of the former Board of Health are available, whilst there are regulations in the Factory & Workshops Act 1883 for retail bakehouses. The Dairies Cowsheds and Milk Shops Order 1885 provided for the care of such places and prescribes the duties of the occupier for their sanitary condition. If the necessary extracts from these various regulations were supplied to the owners or occupiers they would

not be able to plead ignorance as an excuse for obvious neglect. Your Inspectors have kept a close watch on the food supply of the District and in one case a magistrate's order was obtained for the destruction of a large quantity of unwholesome fish.

The recent decisions of the local Government Board with respect tot the neighbouring localities of Borstal and Gillingham,must bring the question of main drainage for the whole district into prominence ere long. I have on previous reports alluded at some length to this subject and will now only express the hope that when the time arrives for a practical solution of the question, minor differences of opinion will be sunk in an unanimous desire to arrive at the best known method of removal and disposal of sewage.

Very little in the way of new Sanitary legislation has been accomplished during 1893 the most important to Urban Sanitary authorities being a short "Rivers Pollution pervention Act" which makes it an offence for a Sanitary authority to permit liquid or solid sewage matter to pass into any stream, unless it can be shown that the best practicable means have been taken to render such sewage matter harmless. The condition of the foreshore in Chatham is an offence under this Act, but the worst offenders of all, are the Government authorities themselves,as all the sewage of the various naval and military establishment is drained direct into the river.

Frequent inspections of houses and premises have been made during the year, and in several cases I have

forwarded special reports to your Sanitary Committee, who have ordered the necessary improvements to be carried out

Appended are the following Table.

Table A. Showing deaths during the year 1893 classified according to Diseases, ages, and localities.

Table B. Showing population, Births and new Cases of Sickness during 1893, classified according to Diseases, Ages and Localities.

Table 1, Showing Births, Deaths, and Rate of mortality in 1893

Table 2, Showing Deaths from all causes, and from certain special causes during each Quarter of 1893

Table 3, Inspectors report of Sanitary Work completed during 1893

I remain, Gentlemen

Your Obedient Servant

T.Holroyde M.R.S.I.

Medical Offices of Health

Thatcher

February 1894

Table 1. Showing the Births, Deaths, and Rate of mortality in 1893

Births	Deaths	Birth Rate	Annual Rate of mortality per 1000 from				
			All Causes	Seven Principle Zymotic Diseases	Phthisis	Lungs	Heart
941	609	37. 5	18. 4	3.	2. 0	2. 3	1. 7

able 2, Showing Deaths from all causes and from certain special causes during each Quarter of 1

Quarter ending	Births	Deaths		Deaths from		
			seven principal Zymotic Diseases	Phthisis	Disease of Lungs	Heart Disease
March 31st	254	136	8	26	18	13
June 30th	234	127	5	25	14	10
September 30th	241	183	45	24	12	11
December 31st	212	174	11	20	29	23

Quarter ending	Births	Deaths	Deaths from			
			Seven principal Zymotic Diseases	Phthisis	Diseases of Lungs	Heart Disease
March 31st	254	130	8	26	18	13
June 30th	254	127	3	25	14	10
September 30th	261	183	45	24	13	11
December 31st	212	174	11	20	29	28

Table 3, Inspectors Report of Work done in Sanitary Department

	No, of complaints received during year	206
	No, of inspections of houses, premises &c,	12

		Number
Inspection	Orders issued for Sanitary amendments of houses and premises	85
	Houses premises &c cleansed, repaired, whitewashed &c,	10
	Houses Disinfected	11
Drains	Repaired, cleaned, Trapped ventilated and disconnected	5 26
Bins Cesspool & W.C.	Repaired	22
	New provided	25
	New Provided	14
	Removal of accumulations of dung, stagnant water animal and other refuse	13
	Animals removed being improperly kept	2
	Seizures of unsound food	3

No of lodging houses registered	12
Bakehouses	35
Cowsheds licensed	18
Slaughterhouses	18
